

stage of the disease. He had tried this plan in several cases, and, looking to the incurability of general paralysis, he believed that it was one that they were justified on medical grounds in adopting in a certain number of carefully selected instances.

Mickle, in the early stage of excitement, relied principally on diet, purgation, baths, cold to the head and seclusion.

Turnbull said that for cases in the third stage he used a mattress in three sections, in the centre of which there was placed a small water cushion and a tube for training off the urine. Turning of the patient was thus rendered unnecessary. He had found that bed sores which would not heal when the patient was on an ordinary mattress often closed when an apparatus of this kind was resorted to.

Seymour Tuke had also noticed a change of type in general paralysis. Whether education had to be considered as a point in this change—and especially in the change of type of delusion—had to be further considered. Dr. Clouston's remarks on the sulphonal treatment were exceedingly interesting, but the cases would have to be carefully selected, to say the least.

Campbell Clark said that Dr. Clouston's plan of treating early cases was an attempt to push the patient through the first stage as quickly as possible, and he thought this involved a certain amount of risk. He was not sure that this treatment would always be so successful as Dr. Clouston had found it. It would be of great importance to be able to give a definite prognosis as to whether the disease was going to run a short or a long course. He had not been able to confirm Beavan Lewis' views on this subject especially with regard to the pupil symptoms to which he had attached so much importance in the matter of prognosis.

Yellowless expressed his distinct disapproval of Dr. Clouston's method of treating the first stage.

Dr. Clouston thought that he must have expressed his views as to the sulphonal treatment so as to be misunderstood. As a matter of fact he had only used it in that way in about three cases within the last five years. They were extremely bad cases.

Regarding the frequency of the disease, Drs. Clouston, McDowall and Turnbull believed it to be very decidedly on the increase. Regarding etiology, Dr. Clouston said that he did not believe in the syphilitic origin of the disease, though he admitted that there were facts which might point that way. Campbell Clark had concluded that only a very small proportion of the cases could be attributed to syphilis.

PATRICK (Chicago).

STUDY OF THE BLOOD IN GENERAL PARESIS. By Jos. A. Capp (Am. Journal of Medical Sciences, June, 1896).

One of the most notable and worthy studies of the year in the United States is the one above, notable because one of so few of like character; worthy because a result of painstaking labor in a line promising small practical immediate results. This work is really an outcome of the McLean Laboratory. It is systematic in that it begins with a review of all previous findings. These previous studies are not numerous, and were not made to be inclusive of all points. Notably among them, McPhail found hæmoglobin low and white corpuscles increased in the later stages of general paresis; Lewis found about the same; D'Abundo, that blood from a paralytic is more toxic than from a normal person. Other observers have reported on very few cases and with no specially novel findings.

The author details his method as showing the efforts to secure accuracy, and gives the accuracy of cells used (Ehrlich's). The time selected for the examination was from three to five P.M. and during digestional leucocytosis. Ten normal adults in health were first examined under similar conditions for control tests, these not showing any very marked increase as due to digestion.

He finds from examination of nineteen cases that (1) the hæmoglobin and red corpuscles are always diminished; (2) most cases show a slight leucocytosis amounting on an average to about 22° above the normal—early cases may have no leucocytosis whatever; (3) in the differential count a decrease is found in the lymphocytes along with a marked increase in the large mononuclear cells. The eosinophiles in a few cases are very numerous.

Convulsions and apoplectiform attacks:—1. The red corpuscles and hæmoglobin are usually increased at the time of a convulsion. During an apoplectic attack of long duration they are both somewhat diminished.

2. The specific gravity is variable, sometimes increasing, sometimes diminishing, at the time of an attack.

3. There is a leucocytosis after convulsions and apoplectic attacks, which is as sudden as it is usually pronounced. It certainly does not appear within a very short time preceding the convulsion, probably not before it actually takes place.

4. The degree of leucocytosis and the period of its continuance, as a rule, vary directly with the length and severity of the attack.

5. In the production of the leucocytosis the large mononuclear cells are increased relatively more than any other variety.

6. The fact that after convulsions and apoplectic attacks in general paresis there is not only an increase in the number of white cells, but a change in their character, as shown by the differential count, and at times abnormal cells appear, is an argument against the theory that leucocytosis is merely a change in the distribution of the white corpuscles.

PHELPS.

POLYNEURITIC PSYCHOSES. By Emil Redlich, M.D. (*Wiener klinische Wochenschrift*, Nos. 25, 26 and 27, 1896).

It was Korsakow who first made psychoses due to polyneuritis well known, and showed that they could not be considered merely as the effect of alcohol, inasmuch as they were observed in polyneuritis from other causes. He attributed the mental condition to the presence of toxic substances in the blood, and called it *cerebro-pathia psychica toxæmica*.

Numerous writers have accepted this view. Wagner has stated that most postfibrile psychoses have a connection with polyneuritis.

Redlich reports two cases of polyneuritic psychosis. In the first case the history of chronic alcoholic intoxication is given, but Redlich attributes the polyneuritis in large part to chronic intestinal disturbance. When the nervous system has been impaired by chronic alcoholism it is especially susceptible to autointoxication. The first manifestation of the psychosis were noticed in mental confusion associated with a condition of excitement and anxiety. This excited state soon passed away, and the patient lost all power of orientation. She was unable to recognize the place in which she was, or the persons about her. She was unable to accept new ideas or to recall the events of the past year, and thus presented the symptom known as retro-antegrade amnesia, which is seen after injuries to the head, hysterical attacks, apoplectic insults, etc. There was no very great disturbance of the intellect, and the events which had occurred previous to the past year could be recalled. A symptom often seen in these disturbances of memory was present in this case. The patient, for example, believed she had just returned from a walk, although in reality she had been for weeks in the hospital, or else that she had previously known the persons about her; such deceptions of memory are not uncommon in the polyneuritic psychoses.

Retrograde amnesia may be in part explained by the fact that during the time the events were occurring the memory was already imperfect, but this explanation will not answer for all cases.